

Bulletin 141A MCS Mounting System

- Modularity makes planning easy
- Factory-assembled starters
- Easy starter exchange
- Flexible field assembly of starters
 - DOL starters
 - Reversing starters
 - Star-Delta starters
 - Soft starters
 - Inverter
 - Complete range of accessories
- 3 mounting methods
 - On busbars
 - On 35 mm and 75 mm top hat rails
 - Screw fixing

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Standards Compliance

UL 508
 CSA 22.2 No. 14
 EN 60947

Certifications

CE
 cULus

Examples given in this section are for reference purposes. This basic explanation should not be used for product selection; not all combinations will produce a valid catalog number.

141A – G S 45 R R 25
 a b c d e f g

a		c		d		f	
Type		Width		Top Hat Rail		Current Rating	
Code	Description	Code	Description	Code	Description	Code	Description
C	Compact standard busbar module with wires	45	45 mm	R	RA-specific plastic rail	Blank	0 A (no wires)
G	Standard busbar module with wires	54	54 mm	S	Standard plastic rail	16	16 A
		63	63 mm	M	Metal rail	25	32 A
		72	72 mm			45	63 A
		81	81 mm			125	125 A
		90	90 mm				
		180	180 mm				
		270	270 mm				

b		e		g	
Length		Bottom Hat Rail		Frame Size	
Code	Description	Code	Description	Code	Description
C	Compact (160 mm)	R	RA-specific rail	H	For 140U-H or 140M-H
S	Short (200 mm)	S	Standard rail		
M	Medium (260 mm)	H	Rail carrier		
		Blank	No bottom rail		

141A – F S 45 R S 25
 a b c d e f g

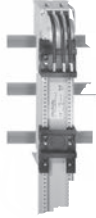
a		c		d		e	
Type		Width		Top Hat Rail		Bottom Hat Rail	
Code	Description	Code	Description	Code	Description	Code	Description
F	Standard busbar module with terminals	45	45 mm	R	RA-specific plastic rail	S	Standard rail
		54	54 mm	S	Standard plastic rail	Blank	No bottom rail
		63	63 mm	V	Screw mounting variable positions		
		72	72 mm				
		81	81 mm				
		108	108 mm				
		110	110 mm				

b		f		g	
Length		Current Rating		Terminal Location	
Code	Description	Code	Description	Code	Description
S	Short (200 mm)	25	32 A	Blank	Terminals on top
M	Medium (260 mm)	63	63 A	T	Terminals on top
L	Long (320 mm)	200	200 A	B	Terminals on bottom
		250	250 A		

Standard Busbar Modules

- Modules plug directly onto the busbar
- Suitable for use with control plug
- Modules with current ratings supply the load current by means of wire or terminal connections
- Modules can form bigger platforms using the connection clips (see accessories)
- For plugging on 5 mm or 10 mm thick busbars
- Meets feeder circuit spacings per UL 508A

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	Description	Rated Thermal Current I_{th} [A]	Width [mm]	Rails	Pkg. Qty.	Cat. No.			
	Standard Busbar Modules with Wires — Compact Length With wires for electrical connection, 160 mm tall For use with Cat. No. 141A-CTU3 Compact Busbar Supports Top Hat Rails: R = MCS-Specific top hat rail	32	45	1R	1	141A-CC45R32			
		63	54			141A-CC54R63			
	Standard Busbar Modules with Wires — Short Length With wires for electrical connection, 200 mm tall Top Hat Rails: R = MCS-Specific top hat rail S = Standard top hat rail	16	45	2R	1	141A-GS45RR16			
			54			141A-GS54RR16			
		32	45			141A-GS45RR25			
			54			141A-GS54RR25			
		63	54			141A-GS54RR45			
			63			141A-GS63RR45			
		125 (For 140-CMN)	90	1M		141A-GS90M125			
			180			141A-GS180M125			
			270			141A-GS270M125			
		125 (For 140M-H, 140U-H, and 140UE-H)§	180	1M		141A-GS180M125H			
			270			141A-GS270M125H			
		Without electrical connections (e.g., for reversing starters)	45	1R		141A-GS45R			
			54			141A-GS54R			
			72			141A-GS72S			
		81	1S	141A-GS81S					
			Standard Busbar Modules with Wires — Medium Length With wires for electrical connection 260 mm tall Top Hat Rails: R = MCS-Specific top hat rail S = Standard top hat rail	32		45	1R+1S	1	141A-GM45RS25
54	141A-GM54RS25								
63	54			141A-GM54RS45					
	63			141A-GM63RS45					
Without electrical connections (e.g., for reversing starters)	45			1S	141A-GM45S				
	54				141A-GM54S				
	63				141A-GM63S				
	Standard Busbar Modules with Terminals — Short Length 200 mm tall With terminals for electrical connection S = Standard top hat rail			32	45	1S	1		141A-FS45S25
		63*	54	141A-FS54S63					
			63	141A-FS63S63					
			72	141A-FS72S63					
			81	141A-FS81S63					
	Standard Busbar Modules with Terminals — Medium Length 260 mm tall With terminals for electrical connection S = Standard top hat rail	32	45	2S	141A-FM45SS25				
		63*	54		141A-FM54SS63				
			63		141A-FM63SS63				
			72		141A-FM72SS63				
			81		141A-FM81SS63				
			Standard Busbar Module with Terminals on Top 222 mm tall With box terminals on top for electrical connection Wire size 70 mm² (2/0 AWG) Universal mounting capability with sliding pocket nuts (M4)	200	108	—		1	141A-FS108V200T
			Standard Busbar Module with Terminals on Top 320 mm tall With box terminals on top for electrical connection Wire size 120 mm² (250 MCM) Universal mounting capability with sliding pocket nuts (M4)	250	110				141A-FL110V250T
	Standard Busbar Module with Terminals on Bottom 222 mm tall With box terminals on bottom for electrical connection Wire size 70 mm² (2/0 AWG) Universal mounting capability with sliding pocket nuts (M4)	200	108	—	1	141A-FS108V200B			

§ Also requires a Cat. No. 140U-H-DRA DIN Rail adaptor.

* Also requires a Cat. No. 141A-FTS63 spacing adapter for UL508A applications.

Control Circuits

Control plugs		
Rated insulation voltage U_i		
Acc. to IEC, EN	[V]	250
Acc. to UL, NEMA, CSA, EEMAC	[V]	300
Rated impulse withstand voltage U_{imp}	[kV]	4
Rated current at 40 °C ambient temperature I_{th}	[A]	12

Micro switch		
Rated insulation voltage U_i		
Acc. to IEC, EN	[V]	250
Acc. to UL, NEMA, CSA, EEMAC	[V]	300
Rated current		Suitable for switching contactors 100-C AC-coil-voltage ≤ 250 V DC-coil-voltage ≤ 120 V

Weight [g]

MCS Iso Busbar Module	[g]
141A-SM45RS25	402
141A-SM45S	300
141A-SM54RS25	418
141A-SM54RS45	494
141A-SM54S	327
141A-SM63RS45	502
141A-SM63S	405
141A-SS45R	279
141A-SS45RR25	381
141A-SS54R	305
141A-SS54RR25	396
141A-SS54RR45	472
141A-SS63RR45	480

MCS Standard Busbar Module	[g]
141A-CC45R32	198
141A-CC54R63	218
141A-FM45SS25	293
141A-FM54SS63	349
141A-FM63SS63	370
141A-FM72SS63	408
141A-FM81SS63	429
141A-FS45S25	272
141A-FS54S63	328
141A-FS63S63	349
141A-FS72S63	387
141A-FS81S63	408
141A-GM45RS25	313
141A-GM54RS25	368
141A-GM54RS45	379
141A-GM63RS45	400
141A-GM45S	211
141A-GM54S	277
141A-GM63S	298
141A-GS45R	200
141A-GS45RR25	302
141A-GS54R	226
141A-GS54RR25	347
141A-GS54RR45	358
141A-GS63RR45	379
141A-GS72S	268
141A-GS81S	289
141A-GS90M125	781
141A-GS180M125	1021
141A-GS270M125	1271

MCS Standard Busbar Module >100 A	[g]
141A-FL110V250T	1200
141A-FS108V200B	1000
141A-FS108V200T	1000

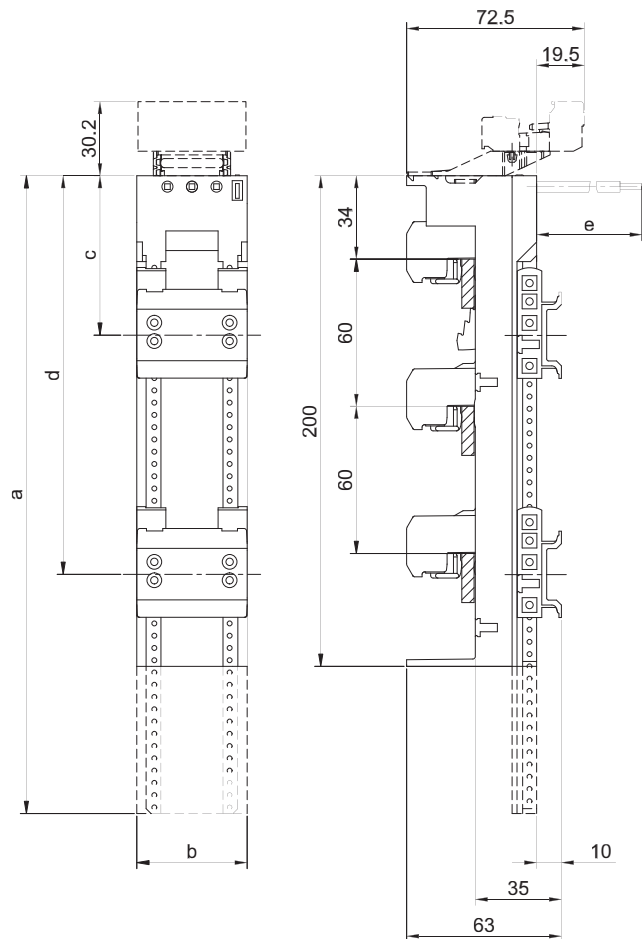
MCS Mounting Module	[g]
141A-WL45RR	211
141A-WL45RRP	240
141A-WL54RR	222
141A-WL54RRP	251
141A-WM45RR	189
141A-WM45RRP	212
141A-WM54RRP	211
141A-WM54RRP	234
141A-WS45RR	163
141A-WS45RRP	180
141A-WS54RR	204
141A-WS54RRP	221

Busbar Components	[g]	Busbar Components	[g]
141A-BCF1	750	141A-NFHCC30	185
141A-BCF1H	40	141A-NFHCC30L	187
141A-BCR	800	141A-NFJ100	3280
141A-BCT1	380	141A-NFJ200	4500
141A-BK1	144	141A-NFJ400	6900
141A-BK180	395	141A-NFVF1150	116
141A-BK228	425	141A-NFVF2240	199
141A-BK250	440	141A-NFVF3300	247
141A-BKC	420	141A-PS105	172
141A-BKH	90	141A-PS145	196
141A-BKS	150	141A-PS200	218
141A-BS10	101	141A-T11	158
141A-BS5	87	141A-T13	591
141A-BST48	700	141A-T13E	20
141A-BST76	1050	141A-TR1	59
141A-CBCF1	420	141A-TR3	203
141A-CBCF1H	18	141A-TR3E	21
141A-CTS3	52	141A-TR3F16	285
141A-CTU3	68	141A-TR4	256
141A-CVN3150	575	141A-TR4E	28
141A-CVN350	206	141A-TS3	131
141A-N160SB	2160	141A-TU3	127
141A-N320SB	5650	141A-VB710528F	840
141A-ND1	130	141A-VB75528F	500
141A-ND2	220	141A-VB76828F	630
141A-NDN66	570	141A-VC3A	185
141A-NDRY66	570	141A-VC3B	251
141A-NF0102	759	141A-VC3C	565
141A-NF1038	760	141A-VC3D	870
141A-NFAC00A	124	141A-VC5E	494
141A-NFAC1A	107	141A-VC5F	943
141A-NFAC2A	109	141A-VC5G	1461
141A-NFAC3A	156	141A-VN3120	485
141A-NFAD	61	141A-VN3185	1140
141A-NFAFR5	65	141A-VN3300F	1619
141A-NFAR	1	141A-VN3300R	1540
141A-NFASNC0	11	141A-VN370	360
141A-NFASNC1	11	141A-VS116	21
141A-NFASNF	7	141A-VS135	46
141A-NFASNFD	11	141A-VS170	71
141A-NFD125SB	2190	141A-VS2120	109
141A-NFD160	1300	141A-VS216	23
141A-NFD250	3760	141A-VS235	47
141A-NFD250SB	2460	141A-VS270	74
141A-NFD400	5500	141A-VU3300F	1325
141A-NFD630	7840	141A-VU3300R	1550

Accessories	[g]
141A-AHR45	15
141A-AHR54	16
141A-AHR63	16
141A-AHS72	17
141A-AHS81	18
141A-AK	1
141A-APC10	35
141A-APC12	40
141A-APC8	29
141A-APH	5
141A-AS	75
141A-AS9B	20
141A-AS9S	38
141A-AS9W	20
141A-CAS9B	20
141A-FTS63	8

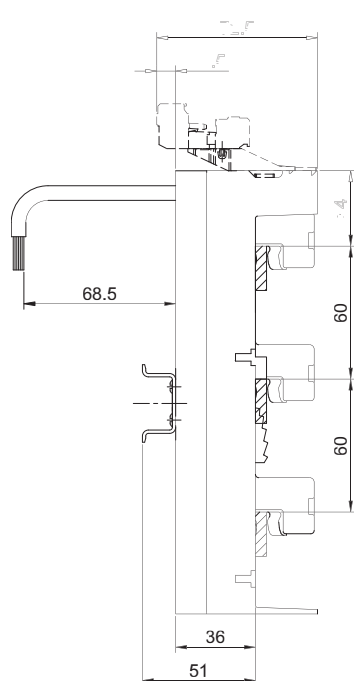
Dimensions are in millimeters. Dimensions are not intended for manufacturing purposes.

Cat. No. 141A-GS, Standard Busbar Modules with Wires

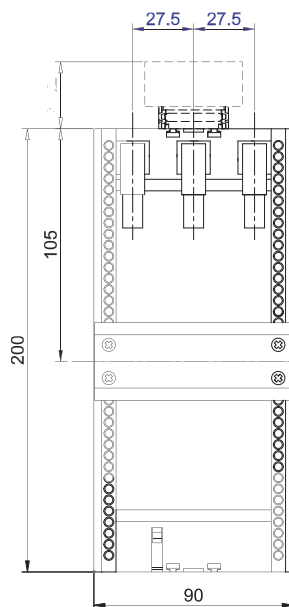


Cat. No.	A	B	C	D	E
141A-CC45R32	160	45	62	—	90
141A-CC54R63	160	54	62	—	90
141A-GM45RS25	260	45	65	170	73
141A-GM54RS25	260	54	65	170	73
141A-GM54RS45	260	54	65	170	95
141A-GM63RS45	260	63	65	170	95
141A-GM45S	260	45	—	170	—
141A-GM54S	260	54	—	170	—
141A-GM63S	260	63	—	170	—
141A-GS45RR16	200	45	65	162.5	73
141A-GS54RR16	200	54	65	162.5	73
141A-GS45RR25	200	45	65	162.5	73
141A-GS54RR25	200	54	65	162.5	73
141A-GS54RR45	200	54	65	170	95
141A-GS63RR45	200	63	65	170	95
141A-GS45R	200	45	—	162.5	—
141A-GS54R	200	54	—	170	—
141A-GS72S	200	72	105	—	—
141A-GS81S	200	81	105	—	—

NOTE:
 FREE SPACE REQUIRED TO PLUG/UNPLUG MODULE INTO THE
 BUSBARS.



Cat. No. 141A-GS90M125



Cat. No. 141A-GS180M125

Cat. No. 141A-GS270M125

